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OUTLOOK

March 12, 1990

Opinion: The Summer Curriculum Transformation Project: Thinking About Women

By Herbert Levitan,
Department of Zoology



For eight weeks during the summer of 1989, I was a participant in the University of Maryland's Curriculum Transformation Project.

"Thinking about Women." The purpose of this project was to prepare faculty from different disciplines to include more scholarship by and about women in their regularly taught courses.

My objective in writing this article is to provide a personal account of the experience in the hopes of providing insights into the costs and benefits of participating. After describing my motivation to join the project, I will reflect on the experience and its personal impacts on me.

Motivation

What did I hope to get out of participating? When I read the announcement of the program that was mailed to all faculty, I viewed the project as an opportunity for me to learn.

I thought about how often students in my classes had asked about the role that gender plays in human behavior, in the nature of certain mental illnesses, and in the effects of drugs. I recalled how ill-prepared I was to discuss these topics.

I wanted to be able to direct interested students to references on the role that gender may play in biologically based phenomena such as behavior, mental illness and the response to drugs. I also wanted to enhance my perspective on how the brain and nervous system works, a principle focus of my research interests.

Lastly, I thought that I would enjoy working and studying with colleagues from other disciplines, with whom I do not normally have the opportunity to interact.

Personal Impacts

What did I get out of the experience?

As a result of the time I spent in the library reading and evaluating material related to sex, gender and the brain, I am much more aware of the key references and of the individuals doing

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Kirwan Announces University Appeal of NCAA Penalties



President William E. Kirwan speaks at a press conference on the men's basketball program.

President William E. Kirwan responded to NCAA sanctions against the University of Maryland men's basketball program by announcing at a press conference March 5 that the university will appeal the penalties.

Kirwan stated the university's position (see below) after Steve Morgan, NCAA associate executive director of enforce-

ment, detailed the penalties during a press conference at Cole Student Activities Building. The penalties were imposed after an NCAA investigation into rules violations committed by the program.

The penalties include:

- A ban from postseason play in the 1990-91 and 1991-92 seasons.

- No live telecast of team games during the 1990-91 season.
- Return of more than \$400,000 the school received for the team's participation in the 1988 NCAA Tournament.
- Reduction from 15 to 13 of the scholarships available for players during the 1990 and 1991 academic years.
- Three-year probation.

More than 200 reporters, faculty, staff, players, coaches and students attended the press conference.

The following is the Statement on NCAA Sanctions presented by Kirwan at the press conference:

On Saturday, March 3, 1990, I received the report of the NCAA Committee on Infractions concerning violations in the University of Maryland's men's basketball program.

On behalf of the University of Maryland at College Park, I want to express our gratitude to the NCAA for its assistance throughout the period of investigation into this matter. I also want to say how impressed I have been with the professionalism of the NCAA staff and the seriousness with which the Infractions Committee conducted its hearing. I am pleased that the report acknowledges the University's extensive investigation of the men's basketball program, our total

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University Receives \$1.5 million Grant for Elementary Mathematics School Project

The university is participating in a program to help students better understand mathematics in predominantly minority schools in Montgomery County.

The university has received over \$1.5 million in funding from the National Science Foundation for this project.

In cooperation with NSF and the Montgomery County Public Schools, the university has developed a four-year project to design and evaluate a national model for enhancing the mathematical understanding of children in kindergarten through third grade in predominantly minority schools.

A 1989 National Research Council report states that the majority of students leave school today without sufficient mathematical preparation to meet entering job prerequisites or undergraduate literacy requirements.

"Basic knowledge of mathematics is already demanded in many positions and fields of study, and it will become even more necessary in the future," says project director, Patricia Campbell of the university's Department of Curriculum and Instruction.

The U.S. is facing a shortfall of 560,000 scientists and engineers by the year 2010, says Campbell, with approximately 85 percent of the entering workforce composed of women and minorities. Now more than 80 percent of these positions are filled by white males.

"To meet projected labor market demands," says Campbell, "a 1989 Congressional Task Force noted that women and minorities must be attracted to

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Patricia Campbell

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CLIS to Present Program on Censorship of Children's Literature

The Alumni Chapter of the College of Library and Information Services (CLIS) will present its annual spring continuing education program on March 28 at 6:30 p.m. in 4114 Hornbake Library Building. Anne MacLeod of CLIS and Leila Shapiro of Montgomery County's Public Library System will discuss "Historical and Current Issues in Censorship: Viewing Children's Literature," focusing on the *Amos Fortune: Free Man* case and book banning in public schools and libraries. A light supper (\$5 payable in advance or at the door) will be available at 6:30 p.m., with the program running from 7-9 p.m. Call 454-2590 for information or reservations.

Funds Available for New Study Abroad Programs

The Study Abroad Office with support from the Vice-President for Academic Affairs, has established grants to support faculty who wish to develop new study abroad programs. These grants of up to \$4,000 may be used for development costs, travel, seed money and in some cases faculty compensation. Funds must be expended by June 30, and the deadline for submitting proposals is April 1. For more information, contact Richard Weaver, International Studies Coordinator, at (301) 454-8645 or Valerie Woolston, director of International Education Services, at (301) 454-3043.

RESEARCH HIGHLIGHTS

IPST Examines Data of Sun/Earth Explorer

In 1978 NASA launched the International Sun/Earth Explorer (ISEE), an instrument largely designed, built and calibrated by university scientists and engineers to measure the composition of the solar wind.

"ISEE has been in continuous, flawless operation since its launch 12 years ago—it's allowed us to grab a piece of the sun," says Michael A. Coplan, a research professor with the Institute for Physical Science and Technology (IPST).

Coplan has been analyzing data from the ISEE mission since its inception. Last December he presented his paper, "Space-Based Measurements of Elemental Abundances and their Relation to Solar Abundances" at the winter conference of the American Geophysical Union in San Francisco.

"Unlike most spacecraft which orbit the Earth, ISEE was positioned, until 1984, at a point between the sun and Earth, where it could constantly measure elements in the solar wind," Coplan says. The spacecraft has since been moved to a position at a right angle to the Earth, off the west limb of the sun, where it can measure the affects of coronal mass ejections on the solar wind.

"We wanted to know what the sun is really made of," Coplan says. "Because of this project, the results have allowed us to establish long-term average solar wind

abundance values for helium, oxygen, neon, silicon and iron."

According to Coplan, carbon, nitrogen, magnesium and sulfur abundances have also been measured—by another instrument that is part of a separate IPST project.

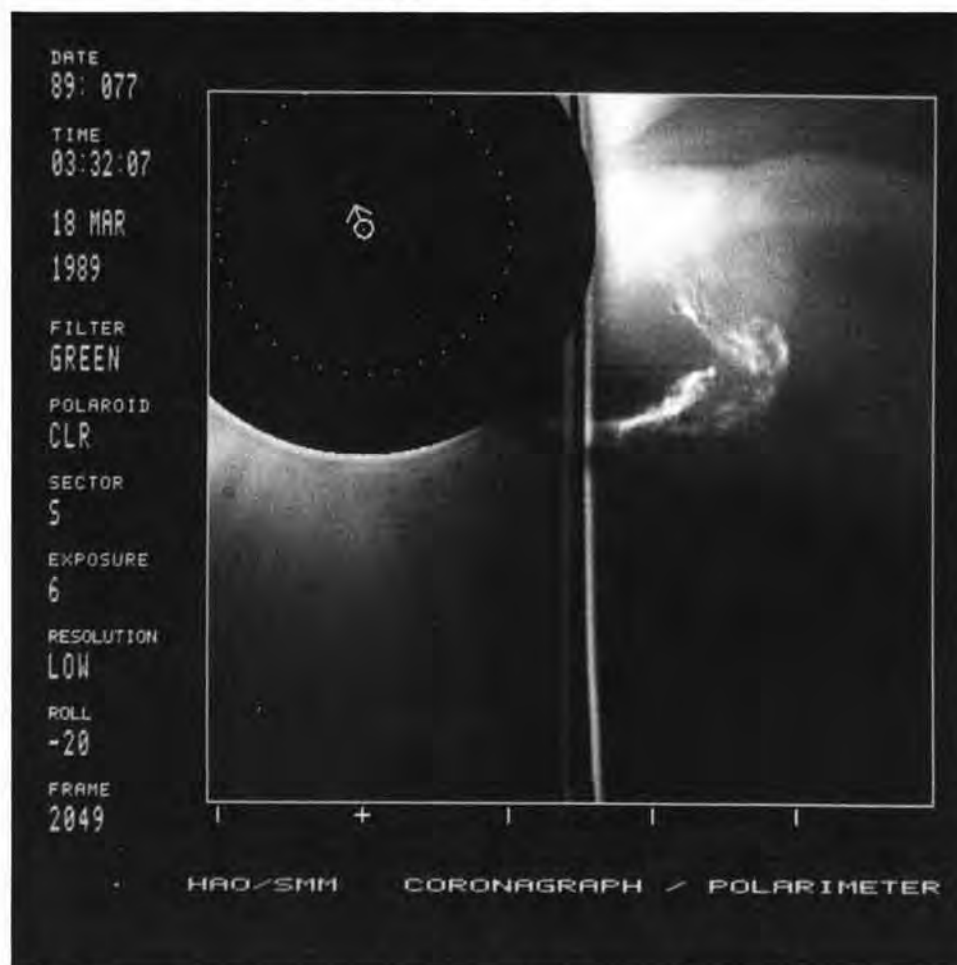
In his work, Coplan is trying to understand the process by which material is boiled off the sun into the solar wind.

"We don't understand yet how the gas that expands from the photosphere becomes hotter at the same time that it becomes less dense," he says.

By studying coronal mass ejections through the repositioned ISEE, Coplan and his colleagues are also able to look at the elements that are "coughed up" from the sun's corona, into the wind.

"We're putting together the pieces of information that bear directly on the origins of the universe," he says. "By combining long-term average abundances with abundances characteristic of special events such as coronal mass ejections, we are able to determine how changes in solar composition occur. Understanding the solar wind leads to understanding of the very origins of our solar system and the stars." ■

—Fariss Samarrai



A Solar Maximum Mission coronagraph of a March 18, 1989 coronal mass ejection.

FYI

Gloeckler Elected AGU Fellow

George Gloeckler, professor of physics, recently was elected a fellow of the American Geophysical Union. Gloeckler, who studies the solar wind, was elected a fellow along with 24 other distinguished scientists for "having attained acknowledged eminence in a branch of geophysics."

Scientist/Teacher Partners Present AAAS Talk

W. Travis Walton, director of the Technology Extension Service, and Andrew S. Adams, a teacher at Old Mill Middle School South in Millersville, Md., were one of six pairs of scientist/teacher partners who presented their projects at a special session of the annual meeting of the American Association for the Advancement of Science in February.

The program they are involved in, called the Bell Atlantic-AAAS Institute for Middle School Science and Technology Teachers, pairs middle school teachers and scientists to work together throughout the school year on such areas as science curriculum and access to new technologies. The program allows teachers to be more aware of current scientific research and gives students a chance to learn from working scientists.

Wilson to Direct New Center at RPI

Jack Wilson, professor of physics and executive officer of the American Association of Physics Teachers, has accepted a position at Rensselaer Polytechnic Institute in Troy, N.Y., as professor of physics and director of the new Lois J. and Harlan E. Anderson Center for Innovation in Undergraduate Education.

Wilson was executive officer at AAPT for eight years and initiated several new projects, including the U.S. Team in the International Physics Olympiad and the

Physics Teaching Resource Agents—a network of support across the country for physics teachers.

Kriemelmeyer Serves on Governor's Council

Harry Kriemelmeyer, assistant vice president for administrative affairs, has been reappointed to a three-year term on the Governor's Science Advisory Council for the state of Maryland. During this term, he will serve as chair of the council.

Zoology Professor Elected AAAS Fellow

Eugene B. Small, associate professor of zoology, recently was elected a fellow of the American Association for the Advancement of Science. Small, who received his Ph.D. from UCLA, researches the evolutionary development of protistan.

Meteorology Sponsors Workshop on Clouds

The Department of Meteorology will hold a workshop focusing on Clouds, Radiation and Climate on March 14 and 15 in the Stamp Student Union.

Clouds control a large fraction of the energy exchange between Earth, the atmosphere and space. But because details are relatively unknown concerning the role of clouds in controlling global climate change, the U.S. Committee on Earth Sciences has given priority to research in this area.

Meteorologists who will address this priority at the workshop include: Robert Cess, State University of New York at Stony Brook; Russell Dickerson and

Robert Ellingson, associate professors of meteorology, College Park; Harshvardhan, Purdue University; Stephen Schwartz, Brookhaven National Laboratory; and, Warren Wiscombe, Goddard Space Flight Center. Presentations will be followed by substantial discussion periods.

The workshop, part of the meteorology department's efforts to inform the community of the science of global change, will be held March 14, 9 a.m. to 4:30 p.m. in Room 1137 and March 15, 9 a.m. to noon in Room 1143. Call Caren Grim at 454-2708 for an agenda of presentations. ■

OUTLOOK

Outlook is the weekly faculty-staff newspaper serving the College Park campus community.

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Summer Scholarship Applications Due March 16

Applications for Senior Summer Scholarships are due March 16 in the Office of the Dean for Undergraduate Studies. The scholarships, open to all majors, allow undergraduate students to enhance their academic experience and earn credit by spending the summer working closely with faculty mentors on scholarly, research, or artistic projects. The \$2,500 scholarships will be available to 50 outstanding students this summer and are funded by undergraduate studies and academic colleges. The scholarships are offered as part of the university's initiatives to enhance the quality of undergraduate education. For information and applications, call Bonnie Oh, assistant dean for undergraduate studies at 454-2530.

Meteorology Presents Third Global Change Lecture

A Science of Global Change lecture, "Outstanding Problems in Atmospheric Chemistry, Including Stratospheric Ozone Depletions" will be presented March 15 by Dr. Paul J. Crutzen, director, Division of Atmospheric Chemistry, Max Planck Institute for Chemistry, Mainz, F.R. Germany. Crutzen, *Discover* magazine's Scientist of the Year in 1984, will discuss ozone depletion and ways in which humanity can curtail activities that cause the gases that contribute to this problem. Crutzen's lecture, the third in a series of global change lectures presented by the Department of Meteorology, begins at 8 p.m. in the Auditorium of the Adult Education Center at University Boulevard and Adelphi Road in College Park. Call 454-8321 or 454-2708.

OUTLOOK

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Levitan Reflects on Transforming the Curriculum

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research in these areas, and now I can direct students to the relevant literature.

Through my reading of the literature, I became vicariously aware of the controversy generated by research efforts and results on the relationship between gender and behavior. However, during my seminar presentation to our group I appreciated first-hand the basis, intensity and consequences of such controversy.

The group's response to my efforts not only revealed to me how the topic should and should not be presented for discussion by students in my courses, but also quashed any thoughts I might have entertained about doing serious original research in this field. It was a vivid revelation of my naivete of how politics can influence and become involved with basic research.

I now have a heightened sensitivity to the socio-political aspects of "basic" scientific research, and the kinds of questions that are "permitted" and "not permitted," "unacceptable," and "suspect" because of the potential misuse of the results to promote bias and exclude from equal opportunity people who are different in various ways.

My experience this summer also gave me a fresh perspective on the subjectivity of science and basic research. Because of different experiences and backgrounds, various investigators will notice different things, ask different questions, interpret their observations differently, and arrive at different conclusions.

Whether such differences in perception and observation among observers of different gender (or people who are otherwise different) are a consequence of biological differences or differences in experiences (nature or nurture) remains a hotly debated topic.

However, I began to appreciate the limits of my own ability to understand, accurately represent, empathize with, and, in general, appreciate what "others" might be perceiving; where "others" were those who differ from me not only with respect to gender and race, but also ethnicity, sexuality (sexual preference), ability, etc. I am not only more sensitive to and more interested in the views of individuals who differ from me in these and other respects, but value more than before their viewpoint because of the different perspectives with which they may view the so-called "natural" world.

Finding ways to encourage the expression of different viewpoints from the diverse student body in my classes, and acknowledging the value of these different perspectives, should greatly broaden and enrich all of our insights into the topic.

Does stereotyping have a valid basis and value? On several occasions during the seminar our readings and discussions required us to focus our attention on the phenomenon of stereotyping; stereotyping by teachers of students who are obviously different by virtue of color, gender or disability, and stereotyping of teachers by students.

In most cases we were advised to suppress the inclination to stereotype because of the effect it could have on the expectations we have or could develop toward those stereotyped, and the consequences it could have for learning by those stereotyped.

While stereotyping has a pejorative connotation because of these possible consequences, I have come to understand it as a behavior we all express, and indeed, must express in order to survive. We need to generalize from limited previous experience, even at the risk of being incomplete or incorrect, in order to live in a very complex world.

We encounter so many new things and people that, instead of assuming we know nothing about individuals we have not previously met or communicated with before, we must generalize from previous experience in order to operate. With continued exposure and opportunities to communicate, most of us cease to stereotype and begin to individualize.

Rather than suppressing that which may be irrepressible, would it not be more productive to explicitly recognize and accept this initial tendency in ourselves as well as in others, and to focus on developing behaviors that help us to discover and reveal the characteristics for which we would like to be distinguished.

Consequences

A clear sign of the depth of the impression my participation in the summer project has had on me and of the nature of my learning is reflected in my activities and actions since the summer. It has not caused me to completely change the direction of my career, but there has been at least a temporary change in emphasis as I seek to attain a new equilibrium that incorporates the new learnings.

- An informal network has emerged of colleagues from the summer seminar that has allowed a few of us to share pedagogical experiences and experiments. Often these exchanges are focused on issues other than gender or bias. For some this has evolved into a greater interest in teaching as a valued activity, and several seminar members have become involved in the planning for the campus-wide Center for Teaching Excellence.

- In a new course on "Creating a Learning Environment" for faculty and graduate students, I co-facilitated a seminar designed to explore the differences that are present among members of a classroom group and how these differences may help or hinder learning.

- As the liaison between the campus committee responsible for improving the classroom climate and my department, I am organizing a workshop for faculty and graduate students on recognizing and being sensitive to differences and diversity among students in our classes and those we advise, how these factors may impact, positively and negatively, on

our ability to teach and the student's ability to learn, and on developing methods for utilizing these differences to increase the likelihood that all involved will achieve their goals.

- As a member of search committees for new faculty, I have found the concepts of affirmative action and equal opportunity have assumed a new meaning for me. Such efforts not only attempt to redress past discrimination and unequal opportunity by providing opportunities for women and minorities but, by enhancing diversity, have important and

often unacknowledged benefits for current faculty as well. The addition of women and minorities may do more to enhance the professional and personal growth of current faculty than that of the new hiree.

In sum, I am grateful for the opportunity this faculty development program afforded me. Perhaps my active and activist commitment will be short-lived, but my participation has left an indelible impression that cannot help but influence the way I conduct myself professionally and personally. ■

Levitan Sees Students as Teachers



Herbert Levitan

Many undergraduate students on campus are older and of a higher quality than in past years and they are bringing experiences to their classrooms that other students, and professors as well, may learn from, says Herb Levitan, professor in the Department of Zoology.

Levitan is on the Committee to Implement the Pease Recommendations and is co-chair of the Committee to Establish a Center for Teaching Excellence. Both committees are looking for ways to improve undergraduate education and to recognize the diversity of the students on campus.

"We are coming to realize that we have many types of students who can make contributions to education here," Levitan says. "We're moving away from the attitude that students are just empty vessels and that our job is to fill them with our knowledge."

Levitan points out that the average age of undergraduate students is increasing, and even with the traditional students, there is much experience brought to class that can fill all vessels with diversified ideas.

"Students can learn from each other if

given the chance," Levitan says. "By recognizing that, the university is moving toward improved undergraduate education."

"The Center for Teaching Excellence," he says, "will help teachers to empower their students to offer their knowledge and experience in the education of each other."

Levitan says curriculum transformation is another effective way the university is coming to realize the diversity of the campus and to recognize the contributions of women.

"An example of the improvements occurring here is the university's policy on inclusionary language," Levitan says. "Whenever we can help people recognize bias and move to eliminate it, we are then recognizing the diversity of our university and the contributions of our entire population."

Levitan points out that the university is also being taken seriously for its efforts to recruit high-quality women and minority students and faculty.

"We all gain when we recognize the contributions of each other," he says. ■

Calendar

March 12 to 28



Gala Spring Luncheon and Fashion Show Planned

All women on the College Park campus are invited to attend a spring luncheon and fashion show on Saturday, March 17 at 12 noon in the Maryland Ballroom of the South Campus Building. Organized by Randi Dutch of the Rossborough Inn to help promote a sense of community, the event will feature a fashion show of new spring items from Casual Corner and a variety of elegant door prizes. Reservations and \$15 payment in advance are necessary. Call 454-3940 or 454-3981 for information.

12 MON

School of Architecture Alumni Exhibition, today through April 4, Architecture Gallery. Call x3427 for info.

English Department Reading by Women Faculty Poets: Verlyn Flieger, Phillis Levin, Sibbie O'Sullivan, Kim Roberts and Betty Townsend, 12 noon-1 p.m., Katherine Anne Porter Room, 3rd floor, McKeldin. Call x0935 for info.

Textile and Consumer Economics Brown Bag Lecture: "Fashion and Women's Roles," Jo Paoletti, curator, Historic Costume and Textile Collection, 12 noon, Maryland Room, Marie Mount. Call x0964 for info.

Campus Senate Meeting, 3:30-6:30 p.m., 0126 Reckord Armory. Call x4549 for info.

Computer Science Colloquium: "E-L Extensible Language and Environment," Thomas E. Cheatham, Jr., Harvard U., 4 p.m., 0111 Classroom Bldg. Call x4244 for info.

Horticulture Seminar: title TBA, Judy St. John, USDA, 4 p.m., 0128B Holzapfel Hall. Call x3606 for info.

13 TUE



Sandra Eleta's 1973 portrait, *Putulungo, The Octopus Man*

Art Exhibition: "Contemporary Latin American Photographers," organized by Aperture Photography, through April 27, opening reception today, 5:30-7:30 p.m., The Art Gallery, Art/Sociology Bldg. Call x2763 for info.

Employee Development Seminar: "English Refresher," Karen Smith, today and tomorrow, 9 a.m.-4 p.m., 1123 Center of Adult Education, \$70. Call x4811 for info.*

Employee Benefits Orientation, 10 a.m., Multi Media Room, Hornbake Library. Call x6312 for info.

Zoology Lecture: "Determinants of Community Structure in Ground-water Resurgence Ecosystems," Dan Fong, American U., noon, 1208 Zoo/Psych. Bldg. Call x3201 for info.

Women's Studies and the Curriculum Transformation Project Brown Bag Lecture and Discussion: "Them's All the Facts: Food, Fate and the History of Women," Mary Matossian (History), 12:30-1:45 p.m., 2109 Symons. Call x5468 for info.

French Department & Swiss Embassy Lecture: "La Suisse et la Francophonie," Jean-Jacques de Dardel, 1st Secretary, Swiss Embassy, 2 p.m., Language House Multi-Purpose Room. Call x4303 for info.

Economics & National Security Lecture: "Expected Utility and Expenditures on Military Resources," Martin McGuire, 3:30-5 p.m., Student Lounge, Morrill Hall. Call x3457 for info.

Comparative Literature Program Screening and Lecture: "Three Women," a film by Robert Altman, discussed by Robert Kolker, 5:30 p.m., 0220 Jimenez. Call x2685 for info.

Hoff Theater Movie: "Hannah & Her Sisters" & "Crimes & Misdemeanors." Call x4987 for info.*

14 WED

Experiential Learning Programs Presentation: Feminist Internship Opportunities, 10 a.m., 0119 Hornbake. Call x4767 for info.

French Department Lecture: "Felix Morisseau-Leroy, écrivain haïtien," Marie-Marcelle Racine, UDC, noon, 2120 Jimenez Hall. Call x4303 for info.

Counseling Center Research & Development Seminar: "The Needs of Black Students at UMCP," Kimya Jones, noon, 0106 Shoemaker Bldg. Call x2937 for info.

Mathematics Department Talk: "Was Your Grandmother a Mathematician?" (Women in Mathematics), Judy Green, Rutgers U., 3 p.m., 3026 Mathematics. Call x7067 for info.

International Coffee Hour, 3-4:30 p.m., 0205 Jimenez Hall. Call x4925 for info.

Writers Here and Now Poetry Reading, featuring James Seay and Tom Sleigh reading from their works, 3:30 p.m., Katherine Anne Porter Room, McKeldin Library. Call x2511 for info.

Astronomy Colloquium: "The Cosmic Microwave Background: Is There Anything Left to do After COBE?" Bruce Partridge, Haverford College, 4 p.m., 1113 Computer & Space Sciences Bldg. Call x3005 for info.

College of Journalism Panel Discussion: Issues and Concerns of Women in Journalism, 7-9:30 p.m., Atrium, Stamp Union, reception will follow. Call x2228 for info.

Hoff Theater Movie: "Hannah & Her Sisters" & "Crimes & Misdemeanors." Call x4987 for info.*

15 THU

Registration Ends, for softball. Call x3124 for info.

Health Center Nutrition Month Celebration, featuring healthy snacks, information, games and displays, 9:30 a.m.-4 p.m., lobby, Marie Mount Hall. Call x4922 for info.

International Education Services Brown Bag Discussion: "Career Development for Women in International Education," led by Valerie Woolston, 12-1 p.m., Arts and Humanities Conference Room, F.S. Key. Call x5728 for info.

Department of Housing and Design Lecture: "Electronic Graphic Design in Television," Raymond East, Senior Graphic Design Engineer, NBC-WRC-TV, 3:30 p.m., place TBA. Call x1543 for info.

Radio-TV-Film Lecture: "Cultural Studies/American Studies and the American Cinema of the '80s," Dana Polan, 3:30 p.m., 2154 Tawes. Call x5054 for info.

Horticulture Seminar: (Part of a series of presentations by women researchers) Holy Shimizu, U.S. Botanical Gardens, 4 p.m., 0128B Holzapfel. Call x3614 for info.

Reliability Engineering Seminar: "Solder Joint Reliability," Werner Engelmaier, Bell Labs, 5:15-6:15 p.m., 2115 Chemical & Nuclear Engineering Bldg. Call x1941 for info.

Physics is Phun Public Lecture-Demonstration: "Seeing the Light," featuring demonstrations of light phenomena, including the eye mechanism and color, today and tomorrow, doors open at 7 p.m., program begins at 7:30 p.m., Physics Department Lecture Halls. Call x3520 for info.

Meteorology Department Public Lecture: "Outstanding Problems in Atmospheric Chemistry, Including Stratospheric Ozone Depletions," Paul J. Crutzen, Max Planck Institute for Chemistry, 8 p.m., Auditorium, Center for Adult Education. Call x8321 or x2708 for info.

16 FRI

Linguistics Colloquium: title TBA, Pim Levett, Max Planck Institut fur Psycholinguistik, noon, 0109 Hornbake Library. Call x7002 for info.

AAUW Published Women's Luncheon: "Dangerous by Degrees," Susan Leonardi, noon, Rossborough Inn, \$8. Call x3940 for info.*

College of Business and Management Second Annual Reception: for Office Support Staff, 12:30-2 p.m., Maryland Room, Marie Mount. Call x6553 for info.

Mental Health Lunch 'N Learn Lecture: "The Use of Sound in Shamanic Healing Rituals: Two Case Studies," Carol Robertson, 1-2 p.m., 3100E Health Center. Call x4925 for info.

Chemistry and Biochemistry Seminar: "Measurement of Nitrogen Oxides During the Airborne Arctic Stratospheric Expedition," Mary Ann Carroll, National Science Foundation, 3 p.m., 1325 Chemistry Bldg. Call x4422 for info.

Meteorology and Chemistry Departments Joint Seminar: "The Use of Chemical Measurements in Atmospheric Photochemical Models," A. Thompson, Goddard Space Flight Center, 3:30 p.m., 1325 Chemistry Bldg. Call x2708 for info.

Microbiology Seminar: "Molecular Biology of Shipping Fever," 3:30 p.m., 1207 Microbiology Bldg. Call x2848 for info.

17 SAT

Rossborough Inn Spring Luncheon Fashion Show, noon, Maryland Room, South Campus Bldg, \$15. Call x3981 for info.*

Men's Lacrosse vs. Towson State, 1 p.m., Byrd Stadium. Call x2121 for info.*

20 TUE

Computer Science Center Lecture: "The Future of Operating Systems," Bill Gates, Chair, CEO, and co-founder of Microsoft Word, Inc., 9 a.m., 1412 Physics Bldg. Call x2946 for info.

Women's Lacrosse vs. Temple, 3 p.m., Denton Field. Call x5854 for info.

21 WED

Men's Lacrosse vs. Ohio State, 3 p.m., Byrd Stadium. Call x2121 for info.*

24 SAT

Men's Lacrosse vs. C. W. Post, 1 p.m., Byrd Stadium. Call x2121 for info.*

26 MON

Horticulture Seminar: "Plant Quarantine Laboratory in Relation to the National Plant Germplasm System," Bruce Parlman, USDA, 4 p.m., 0128B Holzapfel Hall. Call x3606 for info.

Computer Science Colloquium: "Recent Results in Network Flows," James Orlin, MIT, 4 p.m., 0111 A. V. Williams Bldg. Call x4244 for info.

27 TUE

Registration Ends, for pre-season softball, doubles tennis. Call x3124 for info.

Employee Development Seminar: "Telephone Management," Jean Spanarelli, 9 a.m.-4 p.m., 0105 Center of Adult Education, \$40. Call x4811 for info.*

Zoology Lecture: "Phylogeny and Evolution of Broad Headed Drosophilidae," David Grimaldi, American Museum of Natural History, noon, 1208 Zoo/Psych. Bldg. Call x3201 for info.

Women's Lacrosse vs. Virginia, 3 p.m., Denton Field. Call x5854 for info.

Science, Technology and Society Lecture: "The Interplay of Human Values, Technology and Leisure," Philip Bosserman, Salisbury State U., 3:30 p.m., 2102 Shoemaker Bldg. Call x8862 for info.

Physics Colloquium: "Atomic Imaging and Thermodynamic Studies of Surface Flatness," Ellen D. Williams, 4 p.m., 1410 Physics Bldg. Call x3512 for info.

28 WED

Registration Begins, for outdoor volleyball. Call x3124 for info.

Counseling Center Research & Development Seminar: "Implications of Recent Research for Programs for Student-Athletes," Javaune Adams-Gaston, Cathy McHugh Engstrom, and William Sedlacek, noon, 0106 Shoemaker Bldg. Call x2937 for info.

International Coffee Hour, 3-4:30 p.m., 0205 Jimenez Hall. Call x4925 for info.

Science, Technology and Society Film Discussion, featuring Steven Fetter on "Dr. Strangelove," 3 p.m., 0220 Jimenez Hall. Call x5893 for info.

Women's Lacrosse vs. Richmond, 3:30 p.m., Denton Field. Call x5854 for info.

Distinguished Scholar-Teacher Lecture: "Franklin D. Roosevelt: Great Man or Man for His Times," Wayne Cole, 4 p.m., 2203 Art/Soc. Bldg., reception to follow in Art/Soc. Atrium. Call x2530 for info.

Astronomy Colloquium: "Women in Astronomy: 1840 to Present," Vera Rubin, Carnegie Institute of Washington, 4 p.m., 1113 Computer & Space Sciences Bldg. Call x3005 for info.

Art History Lecture: "The Language of Criticism: Its Effect on Georgia O'Keeffe's Art in the 1920s," Barbara Buhler Lynes, 4 p.m., 2309 Art/Soc. Call x3431 for info.

* Admission charge for this event. All others are free.

Calendar information may be sent to John Fritz, 2101 Turner Laboratory or (via electronic mail) to jlfritz@pres.umd.edu.

Concert Band to Play Free Concert at Stamp Union

The Grand Ballroom of the Stamp Union will be filled with the splendid sound of the University of Maryland Concert Band, conducted by L. Richmond Sparks, on March 14 at 8 p.m. The varied program will include music by Giovanni, Hamlich, Youmans, Reed, Anderson and Sousa. There is no admission charge. Call 454-6803 for information.

ARTS AT MARYLAND

Traveling with Slava



Kenneth Pasmanick



John Huling

Between Jan. 29 and Feb. 18, four members of the music department faculty circled the globe in long hops, flying west the whole time, ending up back in College Park somewhat unsure of the time or date, but filled with unforgettable memories.

No, they weren't part of a new, exotic round-the-world race, but are members of the National Symphony Orchestra in addition to being on the music faculty, and they were on an historic tour with the symphony to Japan, Moscow and Leningrad.

The four—principal trombonist Milton Stevens, principal bass Harold Robinson, principal bassoonist Kenneth Pasmanick, and assistant principal trombonist John Huling—have all traveled with the NSO before, but this tour was special: the Soviet Union in a dramatic gesture had restored the citizenship of conductor Mstislav (Slava) Rostropovich and his opera singer wife, and the Soviet Union concerts were performed in that emotional context.

The tour had been planned more than a year ago with a program of mostly Russian music: Prokofiev, Tchaikovsky, Shostakovich. "Slava wanted to show them an American orchestra could play their music and style and be authentic about it," says trombonist Stevens.

But these selections also had a poignant and personal aspect for Slava, which was fulfilled at the first Soviet concert, when he conducted the Tchaikovsky Symphony No. 6 and the Shostakovich Symphony No. 5—the last works he had conducted before his exile in 1974.

The Soviets were good hosts, says Stevens, taking the American musicians to the Moscow Circus, where its famous clown Popov had the spotlight put on Slava seated in the audience, and on special tours of the Kremlin and Kremlin Palace, and while in Leningrad, the Hermitage Museum.

What Stevens particularly enjoyed was the chance to meet other professional trombone players from all over the world. While the NSO was in Japan, for example, the St. Louis Symphony and the Royal Stockholm Philharmonic were also in town, so he was able to meet not only with his Japanese counterparts, but also with the American and Swedish trombonists to swap stories and discuss equipment. In Leningrad he made friends with "Alexei," trombonist in the Leningrad Philharmonic, by speaking mostly in German, the one language, besides music, they had in common.

The excitement wasn't over when the orchestra returned to the United States, says Stevens. President Bush invited the entire group and Slava to a reception at the White House, "With the Marine Band playing for us," he says. And in Kennedy Center when the NSO performed the Shostakovich Symphony No. 5 and the Dvorak Cello Concerto that had been such a hit on the tour, he says, with some awe, "it brought the house down."

Other Americans will have a chance to share in some of the excitement through an up-coming television program about the tour on *Sixty Minutes*, tentatively scheduled for the end of March, and through a CBS Masterworks recording made in performance in the Soviet Union. Stevens says that at the end of the Tchaikovsky Sixth Symphony performance in Moscow there is no way the sound engineers can edit out the shout—in Russian—"Extraordinary!" that came from an enthusiastic member of the audience.

The traveling NSO Maryland faculty will hit the road again in June for the Casals Festival in Puerto Rico and in October for a European concert tour that will include Scandinavia. With any luck, Stevens will be able to swap more stories with the Swedish trombone playing friends the met in Japan. ■

—Linda Freeman



Milton Stevens



Harold Robinson

Contemporary Hispanic Popular Culture is Focus of Fine Arts Institute

Contemporary Hispanic popular culture is the focus of the last in a series of three Multicultural Perspectives in the Arts festivals for Maryland secondary school teachers.

The festivals are part of an outreach effort to area high schools.

Sponsored by the Center for Renaissance and Baroque Studies and funded by the Maryland Humanities Council, the day-long program will be held Friday, March 30 in the Stamp Student Union.

More than 100 secondary school teachers are expected to attend. The festival is also open, free of charge, to members of the campus community. Interested persons must register by the end of the day Monday, March 26. (For more information, call 454-2740).

The program will feature speakers on dance, art, music, and literature.

Speakers are:

Lucy Cohen, chair of the Department of Anthropology at The Catholic University of America, who will discuss "Hispanic Culture and the Humanities Tradition."

Rei Berroa, Department of Foreign Languages at George Mason University, on "Gabriel Garcia Marquez: Fiction and Society."

Belgica Rodriguez, director of the Museum of Modern Art of Latin America at the Organization of American States in Washington, D.C., who will describe "Images of Magic and the Occult in Contemporary Latin American Art."

Carol Robertson, Department of Music, the University of Maryland at College Park, who will speak on "Contemporary and Traditional Themes in Current Latin American Music."

And Marina Keet, Department of Theatre and Dance, George Washington University, who will lecture and demonstrate "The Folkloric Tradition in Hispanic Dance." Keet is the sponsor of the Spanish Dance Society, a troupe of American students at GW who have been trained in traditional Spanish dances. The group will perform here.

The program will begin with registration at 9 a.m. in Room 2111 of the Stamp Union. ■

—Tom Ottwell

Bateson to Speak on "Composing a New Life"

Mary Catherine Bateson, Clarence Robinson Professor in Anthropology and English at George Mason University and president of the Institute for Intercultural Studies, will discuss themes from her new book, *Composing a Life* (Atlantic Monthly Press) March 12 from 4 to 5:30 p.m. in Room 2203 of the Arts/Sociology Building. Bateson is being presented by the College of Education with partial support from the Graduate School in conjunction with Women's History Month.



Honoring the University's Outstanding Woman

Each year since 1977 the President's Commission on Women's Affairs has honored an outstanding woman on the College Park campus through its prestigious Outstanding Woman Award. The award recognizes demonstrated excellence in one or more of six areas: service, research, leadership, administration, women's issues, and teaching. The commission is now inviting nominations for the 1990 award, which should be submitted by March 30 to Richard McCuen in Civil Engineering. Call 454-6668 for information and forms.

Lilly Fellows to Sponsor First Undergraduate Education Day

Last year, when the first seven junior faculty members were chosen to participate in the Lilly Endowment Teaching Fellows Program, one of their assignments was to sponsor a spring conference on the state of undergraduate teaching.

As a result, April 18 has been designated as Undergraduate Education Day when teachers and students at College Park can meet during classtime to discuss what makes good teaching and learning.

Originally, the day's activities were designed to take place in the departments represented by the seven Lilly Fellows: Kent Cartwright (English), Joan

Frosch-Schroder (Dance), W. Andrew Marcus (Geography), Joy A. Mench (Poultry Science), Sheri L. Parks (Communication Arts and Theatre), Mary Corbin Sies (American Studies), and Gerald S. Wilkinson (Zoology).

However, Maynard Mack Jr., co-chair of the Lilly Fellows selection committee, says, "We hope that all faculty and students will be interested and want to participate. I've already talked with the Student Government Association, and several students asked if their department could participate. It should be very stimulating."

Undergraduate Education Day will begin in earnest during classes on

Wednesday, April 18. Mack says the current Lilly Fellows are encouraging faculty to meet with their own classes or consider switching with another teaching colleague, perhaps in another department, to give a fresh perspective and insure a general discussion. The fellows are also encouraging teachers with a Tuesday/Thursday schedule to hold their discussions on April 17.

In the early afternoon on the 18th, participating departments will host student-faculty assemblies to review the day's conversations with an eye to 1) making recommendations to the department's committee concerned with undergraduate teaching and 2) to submit-

ting (at a later date) a brief report to the Dean of Undergraduate Studies.

At 4 p.m., April 18, the Lilly Fellows will host a campus-wide plenary session in Room 2205, LeFrak for further discussion. All members of the campus community are invited to attend, whether or not their departments have held separate forums, Mack says.

For information on suggested discussion questions or details of Undergraduate Education Day, call any of the current Lilly Fellows, Maynard Mack Jr. at 454-7001, or Kathryn Mohrman, dean of undergraduate studies, at 454-2530. ■

—John Fritz

For Sandy Mack, Motivation to Improve Teaching Comes From the Classroom



Maynard Mack Jr.

LARRY CROUSE

"You never really become good at teaching. After a while, though, you're able to get beyond the fear of losing control that causes bad teaching."

So says Maynard (Sandy) Mack Jr., associate professor of English, who, after 16 years of sitting on committees, helping to write campus reports, including the Pease Report, and pushing for improvements in undergraduate education, says he is optimistic for the first time.

"There really is evidence that undergraduate teaching is changing at College Park," says Mack. "We have a president and a vice president for academic affairs who publicly have stated their commitment to improving undergraduate education; the Pease Report is being implemented; and we're getting better students. It's all very exciting."

Mack's activism on undergraduate education has been influenced by several factors, not the least of which is his own experience as a teacher of literature.

"Literature is so similar to the way we encounter people in real life and make

decisions about them," says Mack. "But we don't have to live with the consequences of these decisions as an economist does. My decisions about Hamlet don't compare with whether or not inner city kids get federal aid for day care. By the same token, there's no advantage in lying about literature, which means my students and I can try to be completely honest in our learning," he says.

Mack, who is co-director of the Lilly Teaching Fellows' Program at College Park and a driving force in planning the first Undergraduate Education Day on April 18, says the process of trying to become a good teacher is similar to the effort to improve undergraduate education.

"I've acquired enough confidence to keep my mouth shut and listen," he says. "Students are more serious about their education than we give them credit for. If I can empower my students to think, that's what I want them to take from my class. I suspect a lot of my colleagues feel the same way." ■

—John Fritz

Faculty Participants Selected for 1990 Summer Institute on Women

The Curriculum Transformation Project selection committee has completed selecting participants for the 1990 Summer Institute, "Thinking About Women." The summer program will provide support for fifteen faculty to spend June and July in an interdisciplinary seminar on the new scholarship on women and gender. Participating faculty will revise at least one of their courses to incorporate this new work.

The faculty participants for 1990 will be Maurine Beasley, Journalism; Sue Carter, Zoology; Vicki Freimuth, Speech Communication; Richard Hula, Institute for Urban Studies; Joan Kahn, Sociology;

Elisa Klein, Curriculum and Instruction; Sally Koblinsky, Family and Community Development; Bartholomew Landry, Sociology; Robert Levine, English; Jose Rabasa, Spanish and Portuguese; Meriam Rosen, dance; David Segal, Sociology; Roger Thompson, History; Donald Vanoy, Civil Engineering; and Rhonda Williams, Afro-American Studies and Economics.

Deborah Rosenfelt, director of the Curriculum Transformation Project, is pleased with the strength and diversity of the participants. "We had a very strong pool of applicants," she says. "The selection committee had a difficult task."

The participants include five professors, six associate professors and four assistant professors. They represent seven of the university's fourteen colleges and schools, and include fields in the humanities, the life and applied sciences, the social and behavioral sciences, and communications.

This summer's seminar will be the second in a series of three such institutes funded by the university in response to the Greer Report on women in undergraduate education at the College Park campus.

Participants from last year's project have made a number of campus presen-

tations this year on their experiences during last summer and its effect on their teaching and research.

The 1989 Summer Institute was directed by assistant to the president Betty Schmitz. According to Rosenfelt, who evaluated the 1989 program, virtually all of its participants spoke enthusiastically of the excitement of cross-disciplinary learning and the benefits of exploring the new scholarship on gender, racial, class, and sexual differences. "This work poses real challenges to traditional ways of structuring knowledge," says Rosenfelt. "We're all looking forward to a stimulating summer." ■

CSC Spring Lecture Series Begins

Bill Gates, Chair, Chief Executive Officer, and co-founder of Microsoft Word, Inc., will open the Computer Science Center's Spring Lecture Series. Gates' talk, "The Future of Operating Systems," will take place Tuesday, March 20 at 9 a.m. in the Physics Lecture Hall (Room 1412). The CSC lecture is free and open to all interested faculty, staff and students. Glenn Ricart, CSC director, will deliver the second lecture in the series on Monday, April 16 at 2:30 p.m. in Room 1400 of Marie Mount Hall. A third lecture will be held in May. For more information contact Gail Miller at 454-2946.

ORAA Schedules Grant Winning Workshop

"Grant Winning in 1990," a workshop for grant-seeking campus faculty will be held Friday, April 6 or Saturday April 7 at the Adult Education Center. Workshop instructor David Bauer is familiar to grant-seekers through his workshops and numerous publications on the subject of grant-winning. The one-day workshop will be held 8:30 a.m. to 4:30 p.m. Registrants may choose to attend the Friday or Saturday session. Cost is \$89. Registration forms and payment must be in the Office of Research Administration and Advancement by March 19. For more information, call Anne Geronimo at 454-3987.

COLLEGE PARK PEOPLE

Hazardous Waste: Handled With Care



Contract employees prepare drums of hazardous waste for shipment and final disposal.

Once every other month, an 18-wheeler pulls up at the Environmental Service Facility on the hilltop overlooking the North Intramural Fields.

There it is loaded with as many as 100 55-gallon drums that contain chemicals from campus laboratories and photographic darkrooms, fertilizers and pesticides no longer needed by grounds crew, dead laboratory animals, or surplus paints and thinners from physical plant.

The job of collecting, storing and seeing to the proper disposal of the hazardous waste generated each month by campus laboratories, shops, offices and maintenance operations falls to the Department of Environmental Safety.

One of the goals of the department, says its director **Edward Blackburn**, is to reduce the amount of hazardous waste that is generated on campus. Disposal is costly, requires full compliance with stringent state and federal regulations, and has the potential for liability, Blackburn notes.

"The less we have to begin with, the less potential there is for inhouse problems," Blackburn says. "There is also less potential for liability if less waste is generated." Based on cost of disposal alone, waste reduction is a desirable goal. But, as Blackburn points out, it is also the law.

The cost of disposing of a single 55-gallon drum of hazardous waste can be \$600 or more. Much of the campus-generated waste is shipped for disposal in what is known as a "lab pack." These are 55-gallon drums in which only 15 gallons of waste, placed in individual one-gallon sized containers and cushioned by absorbent material such as ground up corn cobs, may be packaged.

Incineration is the disposal method of choice and the campus has begun using fiber drums which, unlike metal drums, can be incinerated, thus reducing labor costs and time. The material is transported by Kimmins Thermal, a Niagara Falls, N.Y.-based disposal con-

tractor, then to a waste processing/disposal facility called Waste Conversion in Hatfield, Pennsylvania, an intermediate stop for waste. There it is treated and repackaged for further shipment or for incineration.

The campus health center is the collection point for biological waste. This waste is picked up and transported for incineration in Baltimore by a contractor. Other biological wastes are destroyed at the source by the departments of microbiology and zoology, which have their own small incinerators.

Each week waste from experiments and demonstrations in undergraduate chemistry laboratories is consolidated in bins and drums for pick up and storage at the Environmental Service Facility for further shipment and ultimate disposal.

Whenever possible, compatible wastes are consolidated—flammable materials

like paint thinner, acetone, and turpentine, for example, or corrosives such as sulfuric and hydrochloric acids.

Pesticides from the Central Maryland Research and Education Center operated by the Agricultural Experiment Station, wastes generated at the CEES Horn Point facility, wastes from the campus-based state chemist, used photographic chemicals from campus darkrooms—all must be collected and eventually gotten rid of.

"I am concerned that we are not getting everything that is being generated on campus," says **Charlotte Johnson**, the department's manager for Industrial Hygiene and Occupational Safety. She urges that requests for hazardous waste pick up be made even if it is for only a single container. "Don't hold on to it until you think you've got enough to warrant a pick up," she says.

Guidelines from the Washington Suburban Sanitary Commission, which operates the area's waste water and sewage treatment system, say that essentially nothing can be dumped down the drain. Anything that is, WSSC says, must be neutralized at the source.

Because of limits on what can be dumped into the plumbing system or put out in the trash can, Environmental Safety must pick it up, decide if it's hazardous or not, store, ship and see to it that it is properly disposed of, says Johnson.

"Invariably when we get calls about some strange odor in a building or lab, it is usually because someone has poured something down a drain."

When faculty members, researchers or graduate students leave the College Park campus, they sometimes don't take all their belongings, including their stockpiled chemicals, with them. The Environmental Safety staff conducts periodic "clean out" sweeps of campus laboratories. It is not unusual to find as much as ten-years' worth of materials.

Johnson says she has had to deal with and clean up sand contaminated with hydraulic fluid that mechanical engineers were using to test the traction of tires. Campus construction projects sometimes unearth surprises such as a tank containing refrigerants discovered during the construction of the A.V. Williams Building. Collections of ancient bottles and containers still turn up from time to time, she says. In the H.J. Patterson building a clean out crew once discovered some dating as far back as 1912.

In recent years the scope and extent of campus-based research has expanded, generating additional waste products. At the same time there is an increasing awareness on the part of more and more people as to what constitutes hazardous substances and the threat wastes of all kinds pose for the environment.

Consequently, there is more of the material to be collected and disposed of, Johnson says.

Collection and disposal also means an additional paperwork burden. "The management of hazardous wastes is a recordkeeping ballgame," notes Johnson. Records of inspection, of maintenance, of shipment and disposal must be maintained.

"Hazardous waste material has to be charted from cradle to grave," she says. The Uniform Hazardous Waste Manifest tells who generated it, who transported it, and when and who disposed of it, and where. A separate Radioactive Waste Shipment and Disposal Manifest is required for radioactive material. The disposing agency must certify that hazardous waste was disposed of in compliance with appropriate state and federal regulations.

And even then, Johnson says, "The waste generator is always responsible for hazardous waste. You never lose your liability."

Johnson, who holds a B.S. degree in chemistry from College Park, has worked here since 1978. She has taken courses in industrial hygiene and is currently working toward her masters' degree at University College.

Other staff members include **Bobby Shepherd**, physical science technician who is involved with the logistics of waste collection and removal. He oversees the work of the contractors and inspects waste containers on a daily basis. A certified hazardous waste hauler, Shepherd also operates the department's hazardous waste transport vehicle.

Steve Hand is a health physicist who specializes in dealing with all radioactive waste material generated on campus.

The goals of a good waste minimization program include compliance with regulations, reduction of the cost of managing the material, and minimizing environmental and occupational liability, Blackburn says.

To request a hazardous waste pickup from a laboratory or work area, or for additional details about the program, call Charlotte L. Johnson at 454-5866. ■

—Tom Ottwell

Committee Formed to Develop Program to Reduce Hazardous Waste

A committee charged with developing a pilot program for minimizing hazardous waste generated by the chemistry department has been established. The program could be applied to the campus as a whole.

Committee members include Joseph Sampugna and Dorothy Mazzocchi of the chemistry department, John Bielec, assistant vice president for administrative affairs, Edward Blackburn, director of the department of environmental safety, and Charlotte Johnson, the department's manager of industrial hygiene and occupational safety.

The group is looking at the use of microscale experiments in undergraduate teaching laboratories, an incentive structure for minimizing waste, the development of a procedures manual about

hazardous waste, and an inventory of surplus chemicals that could be made available via a common computer network such as PROFS.

Other ideas include developing educational and training programs to acquaint new faculty, graduate students and employees with waste requirements, implementing a hazardous waste "hotline," and the analysis of "unknowns" on campus.

The committee will continue to meet throughout the spring semester. Members of the campus community who may have suggestions about minimizing hazardous waste or who are interested in assisting the group are asked to get in touch with anyone on the committee. Call Charlotte Johnson at 454-5866 for more information. ■

Minority Achievement Award Nominations Due Today

Nominations for minority achievement awards to recognize employees, students and units who have made outstanding contributions to campus equity efforts should be sent to Ray Gillian, assistant to the president, 1111 Main Administration today. Selection criteria include accomplishment as a faculty, associate staff or classified staff, concern for the role of ethnic minorities, campus life activities, and off-campus efforts. Units are judged on recruitment, retention and promotion of minority staff and students, inclusion of minority material in instructional programs, and a climate of affirmative action. Call 454-4703 for info.

Nominations for Disability Issues Awards Are Due March 16

Do you know someone who has worked to improve the quality of life for disabled persons? You can help win campus recognition for such a person through the Disability Commission's annual awards for faculty, students and staff who have initiated special programs or promoted awareness of disability related issues. Call John King of the awards committee at 454-0399 for information or forms. The nominations deadline is March 16.

From Eggdrops to Mousetraps—Physics Olympics Set for March 24

The 1990 Physics Olympics will be held Saturday, March 24, 8:30 a.m. to 4 p.m. in the Physics Building lecture halls, on the entire first and second floors of the Physics Building and outside, across from the new parking garage.

The Physics Olympics is a College Park outreach program that invites high schools in Maryland, northern Virginia and the District of Columbia to send teams of students to compete in physics-related competitions. The Physics Olympics has been held annually since 1978, says coordinator John W. Layman, director of the Science Teaching Center.

Each school is represented by a team of eight students competing in five re-

quired events and three optional events. Some of the events include, Bridge Building, Egg Drops, a Mousetrap Distancer and a Trajectory Contest. Winners in each of the events are recognized as well as the overall first, second and third place team winners. This year the department plans to host 42 teams consisting of about 450 students, teachers and observers, says Layman.

The event is free and spectators may drop by any time during the day to see the events. Anyone interested in helping out with the Physics Olympics may call Layman or Suzanne Currie at 454-5327. ■



High school students build bridges at Physics Olympics

NCAA Sanctions To Be Appealed

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cooperation with the NCAA and our recommendation of substantial self-imposed penalties. I also appreciate the committee's acknowledgment of the various measures that the institution has taken as a result of its investigation. For example, the report points to the fact that no member of the athletics department staff who was found to have violated the principles of ethical conduct is now employed by the University.

I want to state emphatically that the University deeply regrets and is embarrassed by its violations of NCAA regulations. The University accepts full responsibility for these violations and believes it should be subjected to appropriate sanctions.

Having said this, I want to express our great disappointment at the severity of the penalties imposed by the Infractions Committee. The Committee is authorized to suspend prescribed penalties when institutions have self-reported, conducted their own investigations, cooperated with the NCAA, or taken strong independent corrective action. We have done all of these things. Indeed, the Committee stated that because of the University's intensive investigation and total cooperation with the NCAA, less than the prescribed penalties were imposed. However, this does not appear to be the case. The Committee imposed all but the most minor of the prescribed sanctions. And, it went beyond the prescribed penalties when it imposed a second year prohibition from post season play and a third year of probation. Moreover, there was no apparent recognition of the fact that in its entire history the University has never been cited for a major NCAA infraction in any sport, nor was there adequate response to the personnel actions we have taken. One is left to wonder how the sanctions could have been substantially different if we had repeated violations, been uncooperative,

and failed to take decisive action.

We believe it would be appropriate, for example, to place the University on a two-year probation, impose a significant fine, limit recruiting activities, prohibit post season play for one year, and require reports on the implementation of institutional control procedures. However, the sanctions imposed by the Committee go way beyond such measures. They result in too great an impact on innocent people and programs. In this regard, my first concern is for our student-athletes. Several of them, who are in no way implicated in this matter, now will not have an opportunity to play in an NCAA tournament during the remaining years of their careers at Maryland. Further, the full fiscal implications of the sanctions amount to approximately \$3 million. With this financial burden, it may be impossible for us to maintain the current scope and form of our athletic program—a program that involves more than 550 student-athletes and 21 non-revenue producing inter-collegiate athletic teams. Finally, the prohibition from television will have serious financial implications for institutions in the ACC that bear no responsibility in this matter.

Because we believe so strongly that the sanctions imposed are more severe than our infractions warrant, we intend to appeal several of the penalties. The precise nature of the appeal will be determined within the fifteen-day period permitted under NCAA rules. We recognize that the appeal will place an additional burden on the institution and that the prospect for success is uncertain, but out of concern for our student-athletes, the coaches, the athletic program, the University community and our loyal supporters, we must ask the NCAA to consider again, in the light of all we have done, the appropriateness of some of the penalties it has imposed. ■

New Project Enhances Children's Mathematics Understanding

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scientific, mathematical and technological careers in unprecedented numbers."

According to Campbell, many reports have hypothesized that mathematical deficiencies are rooted in inadequate achievement during the elementary schools years and that effective intervention must begin early.

Increasing the Mathematical Power of All Children and Teachers (Project IMPACT) includes an intensive teacher training component that will emphasize how to teach children so they learn concepts as they use mathematics to solve problems.

"In this project, children do not simply memorize mathematics, nor do they merely imitate their teachers," says Campbell. "Rather, children learn the meaning of numbers, geometry and arithmetic as they search for patterns, collect and interpret data, test con-

jectures, and reason."

The classroom activities use settings that sometimes reflect the cultural diversity of the children and sometimes model daily occurrences within America's majority culture.

As part of the IMPACT project, teachers participate in a lengthy summer training that also serves to enhance their own understanding of mathematics. The summer program includes a day camp for minorities and low-income children, providing teachers with an opportunity to practice and improve their new instructional skills.

Once schools begins, a mathematics specialist is on site in each school to observe and assist teachers as they implement their new approaches with a classroom of children. The specialist serves to resolve teachers' concerns and to support sustained change through the year. ■

—Lisa Gregory

Late Campus Chemist Honored

The late William J. Bailey, professor and research chemist in the Department of Chemistry and Biochemistry here, has been elected posthumously to membership in the National Academy of Engineering. Election to the Academy is among the highest professional distinctions accorded an engineer. Membership honors those who have made "impor-

tant contributions to engineering theory and practice, including significant contributions to the literature of engineering theory and practice," or those who have demonstrated "unusual accomplishment in new and developing fields of technology." Dr. Bailey died last December 17 in Honolulu following a heart attack. ■

Allan G. Gruchy, 1906-1990

The internationally distinguished institutional economist, Allan G. Gruchy Sr., died Feb. 19. A long-time professor of economics and professor emeritus at the university, Gruchy joined the College Park faculty in 1937 and after retirement in 1977 continued to teach actively until

1986. He served as acting chair of economics in 1975-76. Florence Schumacher Gruchy, his wife of more than 50 years died in 1988. Survivors include Dr. Allan G. Gruchy Jr.; Katherine Gilliams; a brother, John, and two grandchildren. ■